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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,092	01/16/2001	Shigekatsu Hasegawa	CU-2443 RJS	5016

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Ladas & Parry
224 South Michigan Avenue
Chicago, IL 60604

EXAMINER

CHANG, EDITH M

ART UNIT	PAPER NUMBER
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2634

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DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,092

Applicant(s)

HASEGAWA ET AL.

Examiner

Edith M Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. Figure 1 to figure 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, the term "a predetermined number of chips" in line 10 and the term "a predetermined number of chips" in line 20 do not clearly indicate it refer to the same predetermined number of chips or two different predetermined numbers of chips.

The "a predetermined number of chips" in line 20 of claim 1 is according to the detection results of the first and second correlation detecting parts. How the number of chips is *predetermined*, if it depends on the detection results.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipate by Stansell, Jr. et al. (US 6160841).

Regarding **claims 1 & 5**, Stansell, Jr. et al. discloses a synchronizing circuit/GPS receiving apparatus (FIG.4) synchronizing a predetermined code (FIG.1 29 P or FIG.4, C/Ap is the predetermined code) with first and second codes different in phase, comprising: a receiving unit extracting C/A codes (FIG.1 13-17/FIG.4 123); an information processing device (FIG.1 21-50/FIG.4 142-144, 181/182 to 110) according to the output data of the receiving unit obtaining position information; a code generating part (FIG.1 27 or FIG.4 181/182-174-170-150-154-110 is the code generating part) outputting phase-shifted code (FIG.1 L/E or FIG.4 DP where DP is the 33 of FIG.1, column 19 lines 63-65, column 20 lines 44-55) shifted in phase by a predetermined number of chips from the predetermined code (FIG.1 29 P or FIG.4 DP is shifted in phase); a first correlation detecting part (FIG.1 37 I/FIG.4 140 I) detecting a correlation between the phase-shifted code from the code generating part and the first code (I is the first code); a second correlation detecting part (FIG.1 39 Q/FIG.4 144 Q) detecting a correlation between the phase-shifted code from the code generating part and the second code (Q is the second code); and a code shifting part (FIG.1 21-50-27/FIG.4 154-110 shift the phase according

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to the results of the correlation detecting parts 142-144) shifting the phase of the phase-shifted code from the code generating part by a predetermined number of chips according to the detection results of the first and second correlation detecting parts.

Regarding **claim 2**, Stansell, Jr. et al. discloses the first and second codes are different in phase by $\frac{1}{2}$ chip (I and Q are different in phase by $\frac{1}{2}$ chip); and the code generating part generates the phase-shifted code shifted in phase by one chip from the predetermined code (FIG. 1 29 P is shifted one chip of 29 P/FIG. 4 $D_{cm}(\tau)/D_{ncm}(\tau)$, τ is chosen to shift the DP one chip, column 24 lines 30-35, column 25 lines 1-14).

Regarding **claim 3**, Stansell, Jr. et al. discloses a third correlation detecting part (FIG. 1 43/FIG. 4 142) detecting a correlation between the predetermined code and the first code; and a fourth correlation detecting part (FIG. 1 45/FIG. 4 146) detecting a correlation between the predetermined code and the second code.

Regarding **claim 4**, Stansell, Jr. et al. discloses generating first and second fraction-shifted codes shifted from the predetermined code (FIG. 1 29-33 where the L/E (first fraction/second fraction) is shifted $\frac{1}{2}$ chip /FIG. 4 DP, FIG. 2); and a switch part (FIG. 1 33/FIG. 4 150) switching so that the first correlation detecting part (FIG. 1 37/FIG. 4 142) detecting between the first fraction-shifted code and the first code, and the second correlation detecting part (FIG. 1 39/FIG. 4 144) detects between the second fraction-shifted code and the first code.

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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edith M Chang whose telephone number is 703-305-3416. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edith Chang
March 18, 2004


CHIEH M. FAN
PRIMARY EXAMINER